

REMARKS

The Examiner is thanked for the careful examination of the application, and for the indication of allowable subject matter. By the foregoing amendment, claim 14 has been canceled to avoid duplication with claim 13.

Claims 1-5 and 8-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,024,018, hereinafter *Darel et al.*, in view of U.S. Patent No. 5,909,505, hereinafter *Katayama et al.*

In some situations, image data is acquired in three color components, R, G, and B. For various reasons, including the convenience of adjusting density of the image, the RGB data is converted into other types of color data, e.g., data represented by brightness data and color data. Such colors schemes are sometimes referred to L*a*b* color systems. As explained in paragraph [0012] of the present application, occasionally, as a result of certain image scanners, deviations might occur in the alignment of the line sensors for the RGB. This may disturb the color balance of RGB data such that an achromatic color such as white or black is processed as a chromatic color.

Furthermore, as is known in the art, the L*a*b* data may be subjected to entropy coding or some other type of coding to reduce the size of the data. When the L*a*b* data suffers from the deviations described above, i.e., achromatic colors showing up as chromatic colors, the efficiency or compression ratio of the subsequent entropy coding is negatively impacted.

Accordingly, based on one aspect of the present invention, when converting the original color data into converted color data, a reference color is selected, and the conversion into converted color data is based on a difference from the reference

color. As a result, by selecting the reference color as a commonly used color, e.g., an achromatic color such as white or black, such deviations of the achromatic color are substantially reduced and the compression ratio of the subsequent entropy coding is greatly increased. See paragraphs [0013] through [0015] of the present application.

In the rejection of claims 1-5 and 8-13, the Examiner alleges that *Darel et al.* teaches converting color data that is contained in image data into converted color data that corresponds to a difference from a reference color. However, this statement is based on a misunderstanding of *Darel et al.*. *Darel et al.* does not use a reference color and convert the color data based on a difference from the reference color. *Darel et al.* is concerned with color stabilization in long run press operations. See column 1, lines 59-61. To implement the *Darel et al.* process, a test image is generated based on the entire area of the printed page. See column 2, lines 45-47. Regions of interest (ROI) are selected for the entire image and printed images are compared to the test image to establish a ΔE between the test and reference ROI's. However, the test image is based on the entire image not a reference color, and the comparison is therefore not based on a reference color, as is set forth in the claims of the present invention. Accordingly, *Darel et al.* does not teach or suggest converting color data that is contained in image data into converted color data that corresponds to a difference from a reference color. Instead, *Darel et al.* teaches a data converting unit which from time to time tests the printed image by comparing it to a test image.

Furthermore, the Examiner acknowledges that *Darel et al.* (incorrectly written as Ito in the rejection) does not provide expressly for a coding unit for performing

entropy coding on converted image data in which the color data has been converted by the data converting unit. The Examiner alleges that it would have been obvious to one of ordinary skill in the art to incorporate the teaching of *Katayama et al.* relating to entropy encoding with the *Darel et al.* system because *Katayama et al.* teaches performing image encoding with high efficiency. However, such alleged motivation is far too vague and unspecific to make a meaningful rejection. Under this standard, no claim would ever be patentable in that it would theoretically be "obvious" to combine almost any reference in the image processing art unit with another reference in the image processing art unit. The law requires a specific and legitimate motivation to combine references.

Nevertheless, even if there was motivation to combine *Katayama et al.* with *Darel et al.*, as improperly alleged by the Examiner, as set forth above, *Darel et al.* does not teach or suggest converting color data that is contained in an image data into converted color data that corresponds to a difference from a reference color.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejections of claims 1-5 and 8-13. New claims 17-20 are allowable at least for the reasons set forth above.

In the event that there are any questions concerning this Amendment, or the application in general, the Examiner respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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